

MILPITAS PLANNING COMMISSION AGENDA REPORT

Category: Public Hearings

Report Prepared by: Dennis Carrington

Public Hearing: Yes: ☒ No: ☐

Notices Mailed On: 2/24/06 Published On: 2/23/06 Posted On: 2/24/06

TITLE: **USE PERMIT NO. UP2005-26 and "S" ZONE AMENDMENT NO. SA2005-85**

Proposal: A request to locate cellular telephone antennas in a cylindrical radome near the top of an existing 95-foot tall stadium light located at the northeast corner of the athletic field, and an associated equipment cabinet, at the Milpitas High School athletic field.

Location: 1285 Escuela Parkway

APN: 026-18-003

RECOMMENDATION: **Approve with Conditions**

Applicant: T-Mobile, 1855 Gateway Boulevard, 9th Floor, Concord CA 94520

Property Owner: Milpitas Unified School District, attn: Dr. Karl Black, 1331 E. Calaveras Boulevard, Milpitas, CA 95035

Previous Action(s): Metro PCS received approval of UP2004-11 for a cellular telephone antenna array in a cylindrical enclosure (similar to the one proposed by UP2005-26/SA2005-85) in an existing stadium light and associated CMU equipment enclosure on Jun 23, 2004. The Metro PCS antenna is located on the stadium antenna at the southeast corner of the athletic field.

General Plan Designation: Single Family Low Density

Present Zoning: R1-6, Single Family

Existing Land Use: School

Agenda Sent To: Applicant & Owner

Attachments: Plans
Letter of Explanation
Telecommunications Questionnaire
T-Mobile Milpitas Development Plans
Photo Simulations
FCC License
Radio Frequency Analysis

PJ#2444

BACKGROUND

The project is located at 1285 Escuela Parkway at Milpitas High School, located north of Jacklin Avenue in the northern half of the city. Milpitas High School opened in September 1970. The school is located within an existing single-family residential neighborhood.

THE APPLICATION/PROJECT DESCRIPTION

The application is filed pursuant to Title XI, Chapter 10, Section 57.02-13 (Conditional Uses, Additional Uses Permitted – Public utility and public service use or structure) and ‘S’ Zone Approval, pursuant to Title XI, Chapter 10, Section 42.00 (Site and Architectural Review). The applicant is requesting a use permit and ‘S’ Zone to locate telecommunication antennas near the top of an existing 95 foot tall light pole at the northeast corner of the athletic field at the western end of the campus with associated electronic equipment cabinets located inside a covered CMU (concrete masonry unit) enclosure adjacent to, and north of, the existing bleachers.

Site Layout

The location of the monopole will be the stadium light pole at the northeastern corner of the football field. The associated equipment in the 150 square foot enclosure will be located to the north, and adjacent to, the bleachers. The football field is on the eastern portion of the campus.

ISSUES

Use Permit Findings

Any approval of a Use Permit, requires that the Planning Commission make the following findings:

1. The proposed use is consistent with the Milpitas Zoning Ordinance.
2. The proposed use is consistent with the Milpitas General Plan.
3. The proposed use, at the proposed location will not be detrimental or injurious to property or improvements in the vicinity nor to the public health, safety, and general welfare.

‘S’ Zone Findings

Any approval of an ‘S’ Zone, requires that the Planning Commission make the following findings:

1. The proposed use is consistent with the Milpitas Zoning Ordinance.
2. The proposed use is consistent with the Milpitas General Plan.
3. The layout of the site and design of the proposed buildings, structures and landscaping are compatible and aesthetically harmonious with adjacent and surrounding development.

The following discussion explains how the proposed project, as conditioned, is able to satisfy these findings.

Conformance with the Zoning Ordinance

The project as proposed conforms to the Zoning Ordinance. The Zoning Ordinance, Section 57 (57.01 (b), 57.02-15, and 57.03-5) allows for the proposed use to be approved in this district if it is deemed essential or desirable to the public, suitable to the site, and not detrimental or injurious to properties in the vicinity. The proposed site of the antennas is in the eastern portion of the campus, with the high school located in the middle of a single-family residential area. The antennas will be mounted near the

top of a 95-foot tall stadium light and will be inside a cylindrical radome. The proposed facility blends in well with the site and the light fixture and the CMU enclosure matches the existing buildings on the campus. None of the equipment will be visible from any views. In addition, the facility will provide enhanced coverage for T-Mobile cell phone users and will prevent dropped and lost calls. As stated above, Metro PCS has received approval of an antenna array in the stadium light immediately to the south of the stadium light T-Mobile proposes to use. The proposed T-Mobile antenna array and associated enclosure will be consistent with the already existing Metro PCS antenna array and equipment enclosure.

Conformance with the General Plan

The project is consistent with the General Plan. By providing for alternate telecommunications services for the conduct of commercial and personal business without creating aesthetic disharmony, it promotes a highly amenable community environment, in keeping with Guiding Principle 2.a-G-1.

Compatibility and harmony of the site layout and design of the proposed buildings, structures and landscaping with adjacent and surrounding development

The proposed antenna array will be concealed within a cylindrical enclosure near the top of an existing stadium antenna. The associated CMU equipment container will be located to the north of the bleachers and will have a roof type and be painted a color consistent with that of local buildings. The antenna enclosure is located in the center of the high school campus and will not have a visual impact on the surrounding neighborhood.

Radio Frequency Emissions:

Federal law preserves the City's authority to regulate the placement, construction, and modification of personal wireless service facilities (47 U.S.C. 332((c)(7)(A).) However, federal law does impose a limitation on this authority in the area of radio frequency (RF) emissions. The City is prohibited by federal law from regulating the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of RF emissions to the extent the facilities comply with the Federal Communications Commission's (FCC) regulations concerning such emissions. (47 U.S.C. 332(c)(7)(B)(iv).

The FCC has established guidelines that place limits on human exposure to RF fields generated by personal wireless service facilities. These guidelines have been endorsed by the U.S. Environmental Protection Agency and the Food and Drug Administration. The FCC requires all personal wireless facilities to comply with these guidelines.

The City, however, may still verify that applicants are in compliance with the FCC's guidelines. Therefore, the City requires applicants applying for use approval for any telecommunications device to submit a power density report. This report is reviewed by the City's Telecommunications Advisory Commission to ensure compliance with the FCC's guidelines. To the extent that an applicant's facilities, as proposed, are not in compliance with the FCC's guidelines, the City may require the applicant to make appropriate modifications to the facilities to ensure compliance.

Telecommunications Commission Review

The City of Milpitas Telecommunication Commission reviewed this project on February 27, 2006. Comments and concerns raised by the Telecommunication Commission were in regard to the consistency and compatibility of the proposed antenna array with the array approved in 2004. Staff and the applicant stated that the array location and enclosure will be similar to that approved in 2004. The security of the equipment enclosure was a concern. The applicant addressed the issue by stating that the CMU enclosure would be securely locked and satisfied the commission that the equipment

enclosure will be secure. The Telecommunication Commission recommends approval of the proposal to the Planning Commission.

RECOMMENDATION

Close the Public Hearing. Approve Use Permit No. UP2005-26 and SA2005-85 based on the Findings and Special Conditions of Approval listed below:

FINDINGS

1. As conditioned, the proposed antenna/monopole at this location will not be detrimental or injurious to the surrounding development nor to the public health and safety, as reviewed by the Telecommunications Commission Committee in regards to equipment and safety issues.
2. As conditioned, the proposed use meets the intent of the General Plan and Zoning Ordinance by providing for alternate telecommunications services for the conduct of commercial and personal business without creating aesthetic disharmony at the site or impacts on surrounding development.
3. As conditioned, the project will not result in any significant visual or aesthetic impacts because the proposed antennae/monopole is visually disguised within a cylindrical container located near the top of an existing light standard.
4. The project is categorically exempt from further environmental review pursuant to Class 3, Section 15303 – “New construction or conversion of small structures ... installation of small new equipment and facilities in small structures”.

SPECIAL CONDITIONS OF APPROVAL

1. Use Permit No. UP2005-26 and ‘S’ Zone No. SA2005-85 are for a telecommunications antenna facility consisting of three panels in a cylindrical radome on an existing 95 foot tall light pole at the northeast corner of the playing field at Milpitas High School and associated electronic equipment and cabinets inside a new enclosure as shown on approved plans dated December 16, 2005, except as may be otherwise modified by these conditions of approval. Any future addition of antennas or modification to approved plans, shall require further review and approval by the Milpitas Telecommunications Commission and Planning Commission. (P)
2. Any change in any dimension or location of the proposed antenna, cabinets, and enclosure from that shown on the plans approved December 16, 2005, shall require an amendment to this Use Permit and ‘S’ Zone, which will require a noticed public hearing. (P)
3. This use shall be conducted in compliance with all appropriate local, state and federal laws and regulations and in conformance with the approved plans. (P)
4. Prior to any work, applicant shall obtain review and approval from the Division of the State Architect (DSA).(F)
5. Prior to facility installation, plans shall be submitted that show how the project complies with the following requirements (F):
 - a. Approved access shall be provided to the equipment enclosure. Provide KNOX lock (quantity and location to be determined by the Fire Dept.) for Fire Department access. CFC (California Fire Code) Section 902.4.
 - b. Equipment enclosure/room shall be posted with signage identifying the company name and the site identification number. Signage shall be posed outside and inside the enclosure/room.

- c. The location shall be labeled for the hazard with a sign approved for location and content by the Fire Department. Signage shall conform to the NFPA 704 standards. Signage shall be posted outside and inside of the enclosure/room.
 - d. NO SMOKING signs shall be posed outside and inside the equipment enclosure/room. CFC Section 1109.4.
 - e. Each antennae shall be identified to denote its function, i.e., transmitter or receiver antennae.
 - f. Shutdown of transmitter antennas shall be provided. Written shutdown procedures (including remote shutdown) shall be provided to the Milpitas Fire Department Inspector at the time of inspection. Fire Department inspection shall include system shutdown.
 - g. For remote shutdown process, the phone number, the specific SITE I.D. number shall be posted outside of the equipment enclosure, on the face of the wireless equipment cabinet, at the electrical equipment (if different location than the wireless equipment), roof hatch, fire control, and other access points to the transmitter antennae.
 - h. If manual shutdown mechanism is located on site, the shutdown mechanism shall be identified.
 - i. Prior to final permit signoff, the installer shall call for an inspection by the Fire Department to verify labeling, signage and transmission shutdown.
6. If at the time of project conformance with conditions of approval there is a project job account balance due to the City for recovery of review fees, review of plans will not be initiated until the balance is paid in full. (P)
 7. Roofing material shall be class “C” minimum per 2001 CBC, Table 15-A. (B)
 8. Paving proposed shall comply with the 2002 Milpitas Municipal Code, section II-13-18. All flat non-structural concrete work shall be per 2002 Milpitas Municipal Code section II-13-17.05. (B)
 9. All equipment weighing over 400 pounds shall be seismically anchored and braced per 2001 CBC section 1632. Provide complete structural design calculation (vertical and lateral) and construction details when applying for building permit. Plans and calculation shall be wet signed and stamped by a Civil Engineer in the State of California. (B)
 10. Prior to building permit issuance, developer must pay all applicable development fees, including but not limited to, plan check and inspection deposit fees. (E)

(P) = Planning Division

(F) = Fire Department

(B) = Building Department

(E) = Engineering Division

OMNIPOINT

DBA

T-Mobile

1855 GATEWAY BLVD 9TH FLOOR
CONCORD, CA. 94520

SF 15054 MILPITAS HIGH SCHOOL

PROJECT TEAM			VICINITY MAP	PROJECT SUMMARY		SHEET INDEX																					
ARCHITECT: CONSULTANT'S NAME: MEA ARCHITECTURE AND PLANNING, INC. ADDRESS: 208 UTH STREET, SUITE 310 CITY, STATE, ZIP: SAN FRANCISCO, CA 94103 CONTACT: ROBERT ZEHU PHONE: (415) 503-1363 SURVEYOR: CONSULTANT'S NAME: SCHWIDT CONSULTING INC. ADDRESS: 17985 SKY PARK CIRCLE, STE. G CITY, STATE, ZIP: IRVINE, CA 92614 PHONE: (949) 935-3070 UTILITIES/ ELECTRICAL: CONTACT: JEFF SCHWIDT PHONE: (925) 558-5431 UTILITIES/ TELEPHONE: CONTACT: ALISON SHIMZU PHONE: (415) 493-8755				APPLICANT/LESSEE: OMNIPOINT T-MOBILE 1855 GATEWAY BLVD, 9TH FLOOR CONCORD, CALIFORNIA 94520 TELEPHONE: (925) 329-1695 PROPERTY OWNER: MILPITAS UNIFIED SCHOOL DISTRICT 1331 E. CALAVERAS BLVD. MILPITAS, CA 95035 PROPERTY INFORMATION: SITE NAME: MILPITAS HIGH SCHOOL SITE NUMBER: SF15054 SITE ADDRESS: 1285 ESCUELA PKWY. MILPITAS, CA 95035-3221 GEODETIC COORDINATES: NAD 83 WGS 84 LAT. 37° 21' 00.93" LAT. 37.44355 LONG. -121° 54' 08.13" LONG. -121.89999 A.P.N. 026-18-003 CURRENT ZONING: R1-6 JURISDICTION: CITY OF MILPITAS HANDICAP REQUIREMENTS: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS AND REQUIREMENTS NOT REQUIRED, IN ACCORDANCE WITH CALIFORNIA STATE ADMINISTRATIVE CODE, PART 2, TITLE 24, SECTION 11088.42, EXCEPTION 1.		APPLICANT-CONTACT: CONSTRUCTION MANAGERS: NAME: GLENN BOSWELL T-MOBILE USA, INC. 1200 GATEWAY BLVD., SUITE 500 CONCORD, CA 94520 PHONE: (916) 425 8773 NAME: NATALIE WEINER PARSONS ENGINEERING 185 BERRY STREET, SUITE 5300 SAN FRANCISCO, CA 94107 PHONE: (415) 310 7447 PROJECT PLANNER: NAME: TORIANA HENDERSON PARSONS ENGINEERING 185 BERRY STREET, SUITE 5300 SAN FRANCISCO, CA 94107 PHONE: (415) 672 2314 SITE ACQUISITION: NAME: ANDREW PERZIZAN PARSONS ENGINEERING 185 BERRY STREET, SUITE 5300 SAN FRANCISCO, CA 94107 PHONE: (415) 517 8744	T-1 TITLE SHEET C-1 SITE SURVEY A-1 SITE PLAN A-2 ENLARGED SITE PLAN A-3 PROJECT AREA PLAN & ANTENNA LAYOUT A-4 ELEVATIONS A-5 DETAILS																				
APPROVALS <table border="1"> <thead> <tr> <th>APPROVED BY:</th> <th>INITIALS:</th> <th>DATE:</th> </tr> </thead> <tbody> <tr> <td>D.P.E. /OPS:</td> <td></td> <td></td> </tr> <tr> <td>LEASING:</td> <td></td> <td></td> </tr> <tr> <td>RF:</td> <td></td> <td></td> </tr> <tr> <td>ZONING:</td> <td></td> <td></td> </tr> <tr> <td>CONSTRUCTION:</td> <td></td> <td></td> </tr> <tr> <td>POWER/ TEL.CO:</td> <td></td> <td></td> </tr> </tbody> </table>			APPROVED BY:	INITIALS:	DATE:	D.P.E. /OPS:			LEASING:			RF:			ZONING:			CONSTRUCTION:			POWER/ TEL.CO:			DIRECTIONS TO SITE FROM OMNIPOINT DIRECTIONS: 1. START AT 1855 GATEWAY BLVD, CONCORD 2. TURN ON CLAYTON RD 3. BEAR ONTO CA-242 SOUTH 4. TAKE THE OAKLAND/SAN JOSE EXIT ONTO I-680 SOUTH 5. TAKE THE ADELIN ROAD EXIT 6. TURN ON ESCUELA PKWY 7. ARRIVE AT 1285 ESCUELA PKWY, MILPITAS		PROJECT DESCRIPTION THIS PROJECT CONSISTS OF THE INSTALLATION AND OPERATION OF ANTENNAS AND ASSOCIATED EQUIPMENT FOR THE OMNIPOINT T-MOBILE TELECOMMUNICATIONS NETWORK. • THE PROPOSED PROJECT ENTAILS: • 160 SQ. FT. LEASE AREA WITH (4) BTS CABINETS MOUNTED ON A (6) CONCRETE SLAB WITHIN A CHU WALL ENCLOSURE (BUILT AND PAINTED TO MATCH (E) BUDGS) LOCATED AT GRADE LEVEL. • INSTALLATION OF (2) PANEL ANTENNAS ENCLOSED IN A 36" X 72" RADIOME ON (5) 9'6"-8" HT. LIGHTPOLE. • COAX CABLE RUNS FROM BTS TO ANTENNAS VIA UNDERGROUND TRENCH. • TELEPHONE AND ELECTRICAL SERVICE FROM EXISTING SOURCES.	CODE COMPLIANCE ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES. 1. CALIFORNIA BUILDING CODE CBC-2001 2. CALIFORNIA ADMINISTRATIVE CODE (NCL, TITLES 24 & 26) 2001 3. AISI/WA-222-F LIFE SAFETY CODE 4. NFPA-101-1997 5. CALIFORNIA ELECTRICAL CODE CEC-2001 6. CALIFORNIA MECHANICAL CODE CMC-2001 7. CALIFORNIA PLUMBING CODE CPC-2001 8. LOCAL BUILDING CODE(S) 9. CITY AND/OR COUNTY ORDINANCES
APPROVED BY:	INITIALS:	DATE:																									
D.P.E. /OPS:																											
LEASING:																											
RF:																											
ZONING:																											
CONSTRUCTION:																											
POWER/ TEL.CO:																											

RECEIVED

DEC 1 6 2005

CITY OF MILPITAS
PLANNING DIVISION

ISSUE STATUS

Δ	DATE	DESCRIPTION	REV
-	10/13/05	CODE ZONING	A
-	12/12/05	CODE ZONING	B

DRAWN BY: LYNCH/CHD BY: R. ZEIM



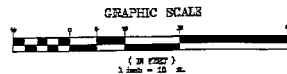
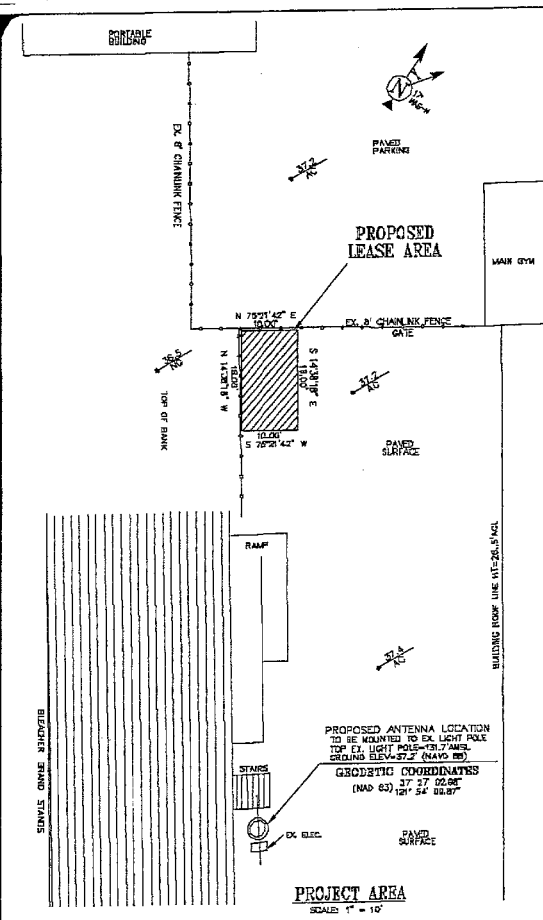
1855 GATEWAY BLVD 9TH FLOOR
CONCORD, CA. 94520

MILPITAS
HIGH SCHOOL
SF-15054

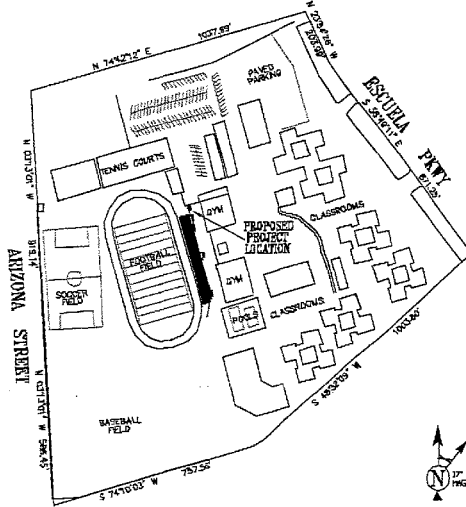
1285 ESCUELA PKWY
MILPITAS, CA 95035-3221
ALAMEDA COUNTY

SHEET TITLE:
TITLE SHEET

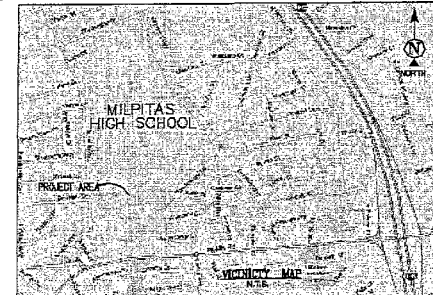
T-1



LANDS OF MILPITAS SCHOOL DISTRICT A.P.N. 028-18-003



PROPERTY BOUNDARY
OVERALL SITE PLAN
SCALE 1" = 200'



PROPERTY INFORMATION

OWNER: MILPITAS SCHOOL DISTRICT
ADDRESS: 1285 ESCUELA PKWY
MILPITAS, CA
SITE: MILPITAS HIGH SCHOOL
1285 ESCUELA PKWY
MILPITAS, CA
ASSIGNMENT NUMBER: 028-18-003
HEIGHT OF LIGHT POLES: 25'-131.74'-00"

THIS REPORT
PROVIDED BY NORTH AMERICAN TITLE COMPANY, DATED JULY 22,
2003, ORDER NUMBER 56903742-PRK.
Legal Description:
PROPERTY SITUATED IN THE CITY OF MILPITAS,
COUNTY OF SANTA CLARA, STATE OF CALIFORNIA.

SURVEY DATE

11/01/03

SURVEYOR'S NOTES

REFERENCE IS MADE TO THE TITLE REPORT ORDER
NUMBER 56903742-PRK, ISSUED BY NORTH AMERICAN TITLE COMPANY,
DATED JULY 22, 2003.
ALL EASEMENTS CONTAINED WITHIN SAID TITLE REPORT
AFFECTING THE HEREIN AREA SURROUNDING THE LEASE HAVE
BEEN PLOTTED. SURVEYOR HAS NOT PERFORMED A SEARCH OF
PUBLIC RECORDS TO DETERMINE ANY DEFECT IN TITLE ISSUED.
THE BOUNDARY SHOWN HEREON IS PLOTTED FROM RECORD
INFORMATION AND DOES NOT CONSTITUTE A BOUNDARY SURVEY
OF THE PROPERTY.

BENCHMARK

PROJECT
ELEVATION ESTABLISHED FROM GPS DERIVED ORTHOMETRIC
HEIGHTS, APPLYING GRID TO SEA LEVEL ADJUSTMENTS TO
NAD 83 CONTROL STATION 'MENS' ELEVATION=2288.0' (NAVD83).

BASIS OF BEARING

BEARINGS SHOWN HEREON ARE BASED UPON U.S. STATE PLANE
NAD 83 COORDINATE SYSTEM. BEARINGS ARE DETERMINED BY
GPS OBSERVATIONS.

UTILITY NOTES

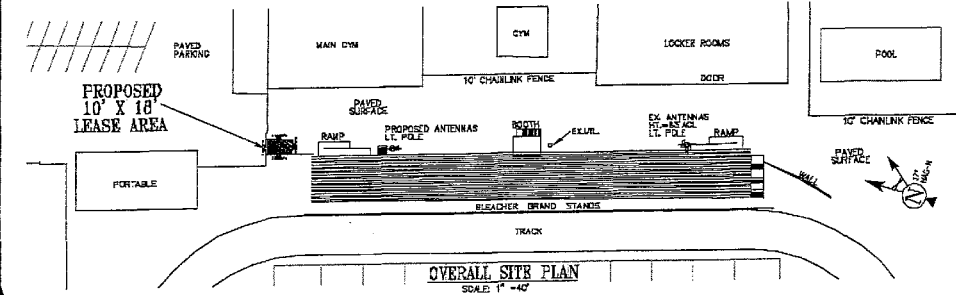
SURVEYOR DOES NOT GUARANTEE THAT ALL UTILITIES ARE SHOWN
ON THEIR LOCATIONS. IT IS THE RESPONSIBILITY OF THE
CONTRACTOR AND DEVELOPER TO CONTACT BLUE STAKE AND ANY
OTHER INVOLVED AGENCIES TO LOCATE ALL UTILITIES PRIOR TO
CONSTRUCTION REMOVAL, RELOCATION AND/OR REPLACEMENT IS
THE RESPONSIBILITY OF THE CONTRACTOR.

NOTES

SUFFICIENT SURVEY EVIDENCE WAS NOT RECEIVED TO
ESTABLISH THE POSITION OF THE BOUNDARY LINES SHOWN
HEREON. THE BOUNDARY REPRESENTED ON THIS MAP IS
BASED ON COMPILED RECORD DATA AND BEST FIT TO
EXISTING IMPROVEMENTS. IT IS POSSIBLE FOR THE LOCATION
OF THE SUBJECT PROPERTY TO SHIFT FROM THE PLACEMENT
SHOWN HEREON WITH ADDITIONAL FIELD WORK AND RESEARCH.
THEREFORE, ANY SPATIAL REFERENCE MADE OR SHOWN
BETWEEN THE BOUNDARIES OF THE BOUNDARY LINES SHOWN
HEREON AND EXISTING GROUND FEATURES, EASEMENTS OR
LEASE AREA IS INTENDED TO BE APPROXIMATE AND IS
SUBJECT TO VERIFICATION BY RESOLVING THE POSITION OF
THE BOUNDARY LINES.

LEGEND

- POINT OF BEGINNING
- VEGETATION
- TOP OF WALL
- TOP OF CURB
- TOP OF DRIVEWAY
- TOP OF SLOPE
- TOP OF SURFACE
- TOP OF WALL
- LOT NUMBER
- SPOT ELEVATION
- DISH ANTENNA
- MICROWAVE ANTENNA
- TELECOMMUNICATIONS MONOPOLE
- WATER CONTROL VALVE
- PIPE INVERT
- BUY WIRE
- FOUND AS NOTED
- POWER POLE
- LIGHT POLE
- ELECTRICAL TRANSFORMER
- AIR CONDITIONING UNIT
- TELEPHONE pedestal
- TELEPHONE vault
- GAS VALVE
- GAS METER
- PROPERTY LINE
- CHAIN LINK FENCE
- WOOD OR IRON FENCE
- WIRE OR BARBED WIRE FENCE
- RAILROAD TRACKS



OVERALL SITE PLAN
SCALE 1" = 40'

ISSUE STATUS

DATE	DESCRIPTION	REV
11/24/05	SITE PLAN	



1855 GATEWAY BOULEVARD, SUITE 900
CONCORD, CA 94520

1855 GATEWAY BOULEVARD, SUITE 900
CONCORD, CA 94520

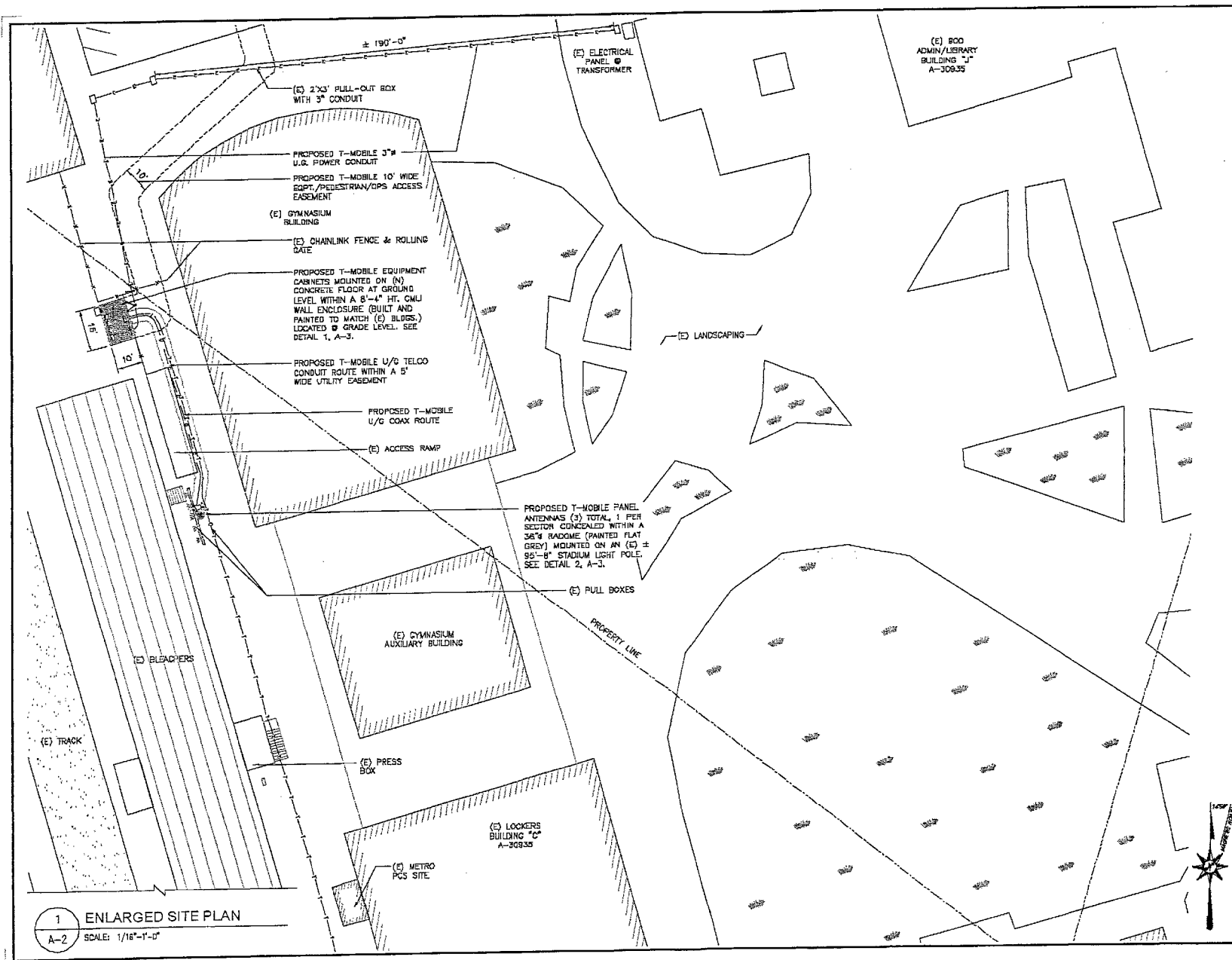
1855 GATEWAY BOULEVARD, SUITE 900
CONCORD, CA 94520

1855 GATEWAY BOULEVARD, SUITE 900
CONCORD, CA 94520

SITE ADDRESS
MILPITAS HIGH SCHOOL
1285 ESCUELA PKWY,
MILPITAS, CA
SF-15204
MILPITAS HIGH SCHOOL

SHEET TITLE
TOPIC SURVEY
EXISTING CONDITIONS

C-1
SHEET 1 of 1



ISSUE STATUS

Δ	DATE	DESCRIPTION	REV
-	10/12/15	BOR ZONING	A
-	12/2/15	DOCK ZONING	B

EXAMIN BY: LHA/CHD BY: R. ZIM



OMNIPONT T-Mobile
1835 GATEWAY BLVD 8TH FLOOR
CONCORD, CA 94020

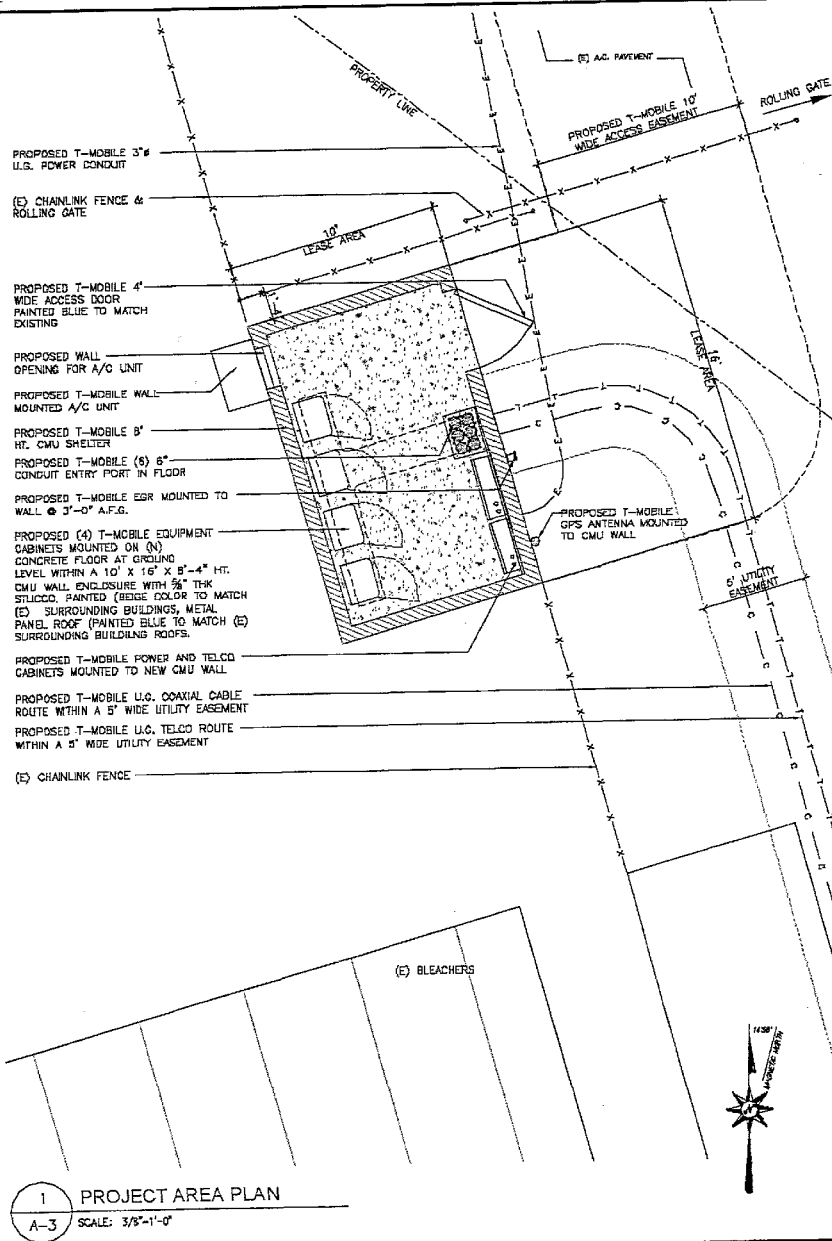


MILPITAS HIGH SCHOOL
SF-15054
1785 ESCUELA PRIVY
MILPITAS, CA 95035-5321
ALAMEDA COUNTY

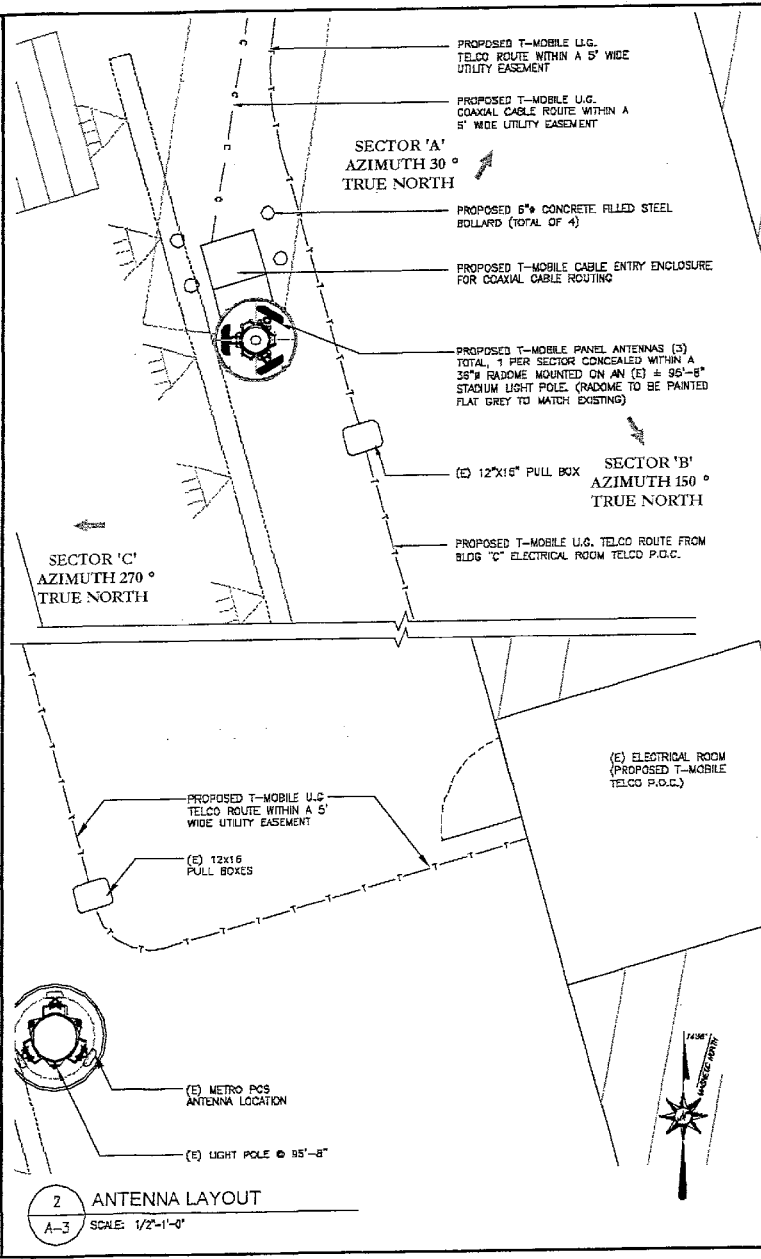
SHEET TITLE:
ENLARGED SITE PLAN

A-2

1 ENLARGED SITE PLAN
A-2 SCALE: 1/16"=1'-0"



1 PROJECT AREA PLAN
A-3 SCALE: 3/8"=1'-0"



2 ANTENNA LAYOUT
A-3 SCALE: 1/2"=1'-0"

ISSUE STATUS			
Δ	DATE	DESCRIPTION	REV
-	10/15/85	CODE ZONING	A
-	12/12/89	LOCAL ZONING	B

DRAWN BY: LYNCH/DIGBY R. ZIM

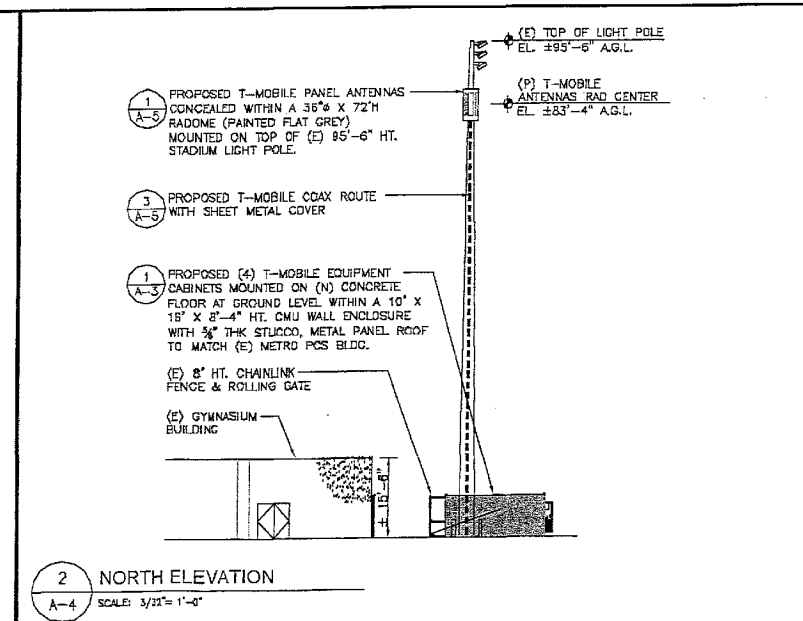
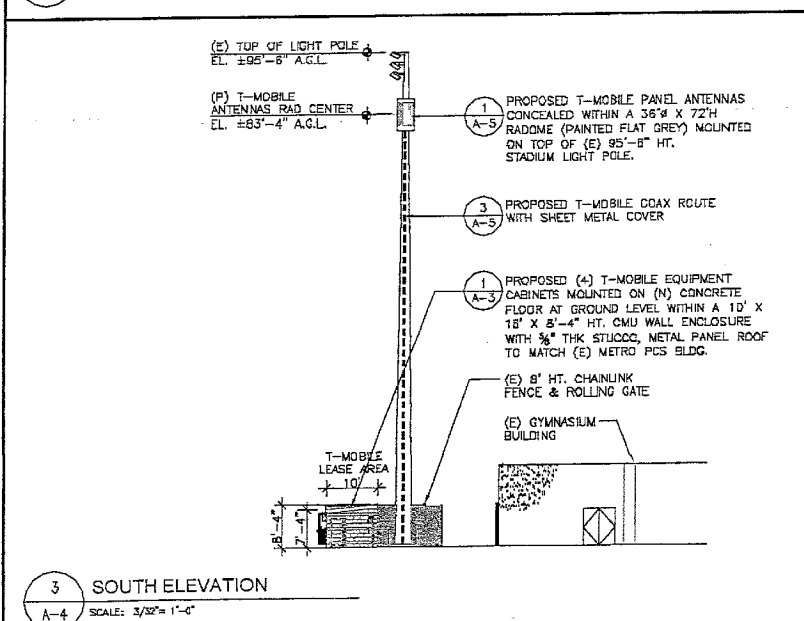
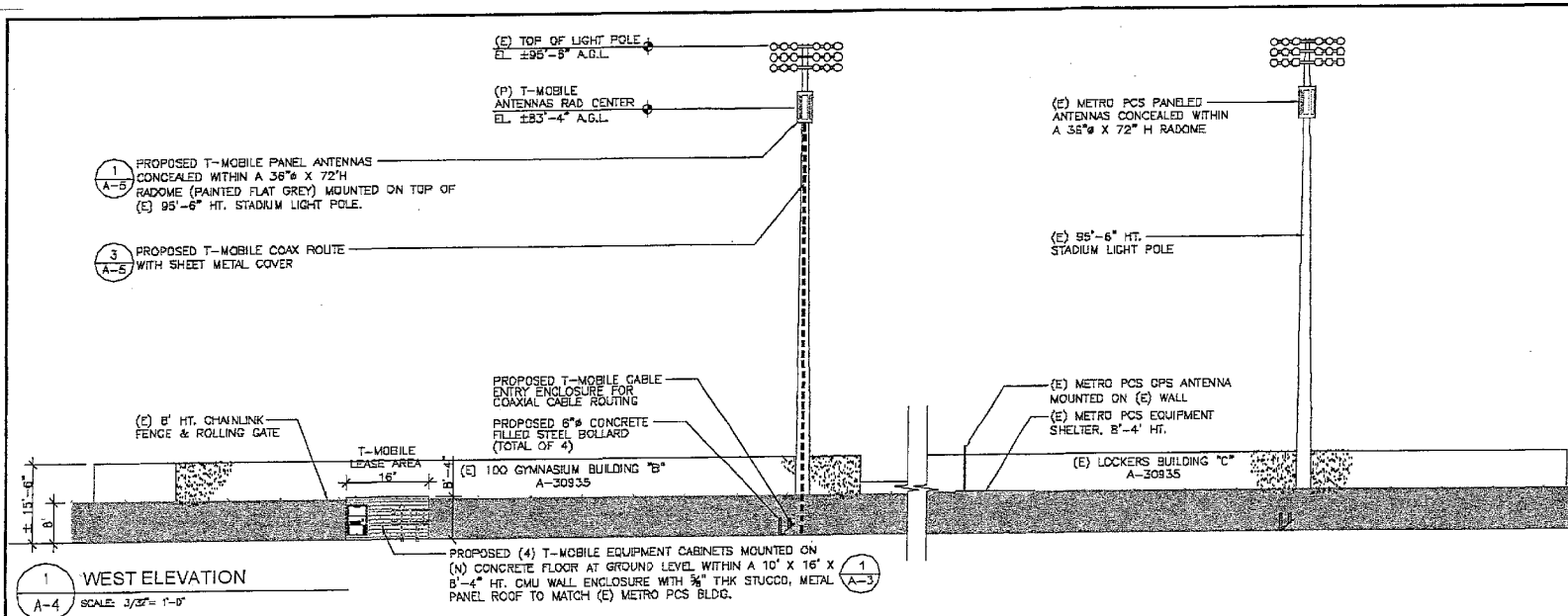
MSA
MILPITAS SCHOOL DISTRICT
1885 GATEWAY BLVD 9TH FLOOR
CONCORD, CA 94520
TEL: 925-288-1200

OMNIPONT
1885 GATEWAY BLVD 9TH FLOOR
CONCORD, CA 94520

MILPITAS HIGH SCHOOL
SF-15054
1035 ESCUELA BLVD
MILPITAS, CA 95035-2201
ALAMEDA COUNTY

SHEET TITLE
PROJECT AREA PLAN
ANTENNA LAYOUT

A-3



ISSUE STATUS			
AI	DATE	DESCRIPTION	REV
-11/12/95	100% ZONING	A	
-12/12/95	100% ZONING	B	

DRAWN BY: LUN/CHIKO BY: R. ZHANG

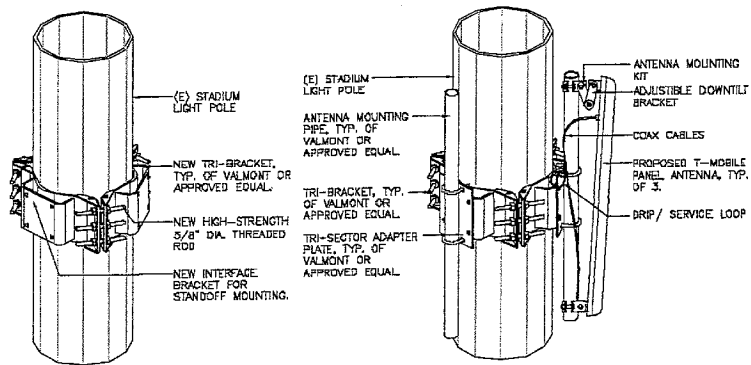
MSA
MILPITAS SCHOOL AUTHORITY
1855 GATEWAY BLVD 9TH FLOOR
MILPITAS, CA 95035
TEL: (408) 886-1234

SOMNIPONT T-Mobile
1855 GATEWAY BLVD 9TH FLOOR
MILPITAS, CA 95035

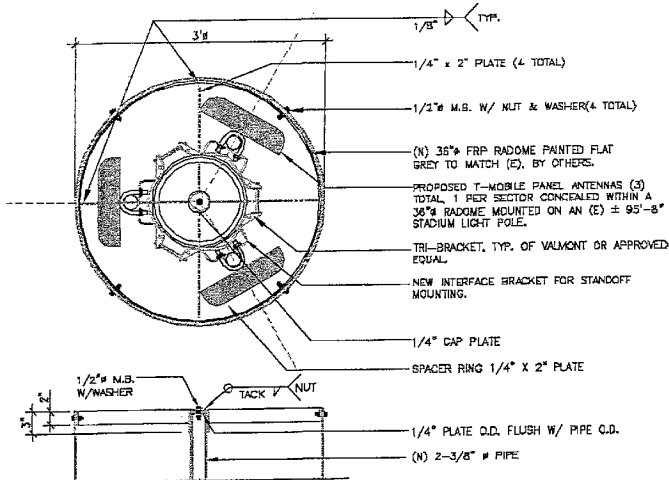
MILPITAS HIGH SCHOOL
SF-15054
20850 SUELA DRIVE
MILPITAS, CA 95035-3221
ALAMEDA COUNTY

SHEET TITLE:
ELEVATIONS

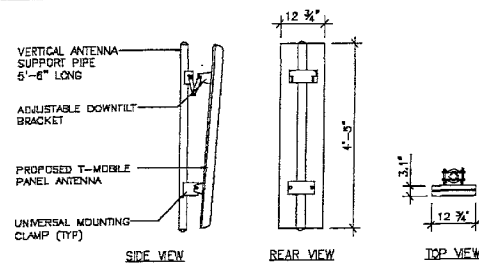
A-4



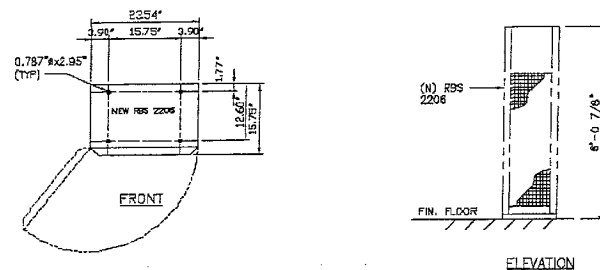
4 ANTENNA MOUNT DETAIL
A-5 SCALE: 1" = 1-1/2"



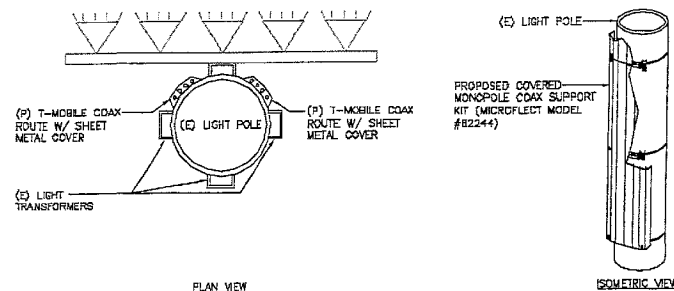
3 ANTENNA MOUNT DETAIL
A-5 SCALE: 1" = 1-1/2"



1 ANTENNA DETAILS
A-5 SCALE: ITS



2 EQUIPMENT CABINET DETAIL
A-5 SCALE: ITS



3 CABLE CLUSTER MOUNT DETAIL
A-5 SCALE: ITS

ISSUE STATUS

A	DATE	DESCRIPTION	REV
-	10/12/85	0002 ZONING	A
-	12/12/85	100M ZONING	B

DRAWN BY: LYNDI CHIK'S BY: R. ZIM



1885 GATEWAY BLVD 9TH FLOOR
CONCORD, CA 94520

MILPITAS
HIGH SCHOOL

MILPITAS
HIGH SCHOOL
SF-15034

1385 SUGAR HILL
MILPITAS CA 95035-3201
ALAMEDA COUNTY

SHEET TITLE
DETAILS

A-5



APN: 026-18-003

Site Address: 1285 Esuela Parkway, Milpitas, CA

T-Mobile Site No. SF 15054, Milpitas High School

Justification Statement/Letter

This zoning application is being submitted to the City of Milpitas Planning Division for zoning approval for a T-Mobile telecommunications antenna application. T-Mobile has identified that no coverage exists in the surrounding project area. T-Mobile submits that the proposed facility will enhance the existing wireless phone coverage; increase much needed capacity in this highly residential area and allow for the integration of new safety and consumer-oriented services into the surrounding community.

The proposed project site is an existing stadium light pole at the Milpitas High School campus, which is located at 1285 Escuela Parkway, California. The subject property is zoned R1-6- Residential. T-Mobile's proposed project site is located next to an existing Metro PCS telecommunication antenna site. Metro PCS site consists of antennas enclosed within a radome, which is mounted on an existing stadium light pole, and its ancillary equipment is located in an equipment shelter. T-Mobile proposes to match the aesthetics of the existing Metro PCS telecommunication antenna site.

Project Descriptions & Visual Resources

The proposed project consists of three (3) panel antennas enclosed within a 36" x 72" radome on an existing 97 FT stadium light pole and will be painted to match the light pole. The panel antennas measure 4' 5" x 12 ¾ ". The proposed project will require four (4) six foot equipment cabinets, which will be housed in a cmu wall enclosure with a secured roof and access door. The equipment enclosure will be painted to match the existing campus buildings. Please see the attached site plans and photo simulations.

Site Selection Analysis

Wireless systems are expanded or introduced in a given area to improve service to customers. There are several reasons to add a new facility. It may extend the coverage to new areas, increase the capacity of the system within the current service area, or improve quality. This proposed wireless facilities will accomplish all three improvements.

This location was also selected because of its position relative to existing sites, providing favorable site geometry for federally mandated E911 location accuracy requirements and efficient frequency reuse. Since 40 percent of 911 calls are from mobile phones, effective site geometry within the overall network is needed to achieve accurate location information of mobile users, through triangulation with active wireless facilities.

Coverage:

For this project, a coverage gap was determined to exist. Coverage can be defined as having a certain minimum level of signal strength in a particular area. T-Mobile's target is to provide -76dBm of signal strength to our customers' areas across the network. This level of service guarantees reliable signal strength inside buildings to provide excellent voice quality in residential neighborhoods and commercial areas. In today's competitive marketplace, T-Mobile requires high quality coverage to be competitive and to fulfill our responsibilities under our FCC license, and comply with CPUC mandates

Capacity:

Capacity is the number of calls that can be handled by a particular wireless facility. When we make phone calls, our mobile phones communicate with a nearby antenna site that can handle a limited number of calls. It then connects to land based phone lines. When a particular site is handling a sufficient number of calls, the available RF channels assigned to that site are at maximum capacity. When this occurs, the wireless phone user will hear a busy signal on his or her phone. For T-Mobile's specific GSM technology, typical sites with 3 antennas can handle a maximum of approximately 150 calls at any given time. The call traffic at the facility is continually monitored and analyzed so that overloading of sites is prevented. The objective for a capacity site is to handle increased call volume rather than expand a coverage area.

Alternative Site Analysis

- 1. Sunnyhills United Methodist Church, 355 Dixon Road;**
- 2. Milpitas PGE Substation, Milpitas Boulevard.**

The above sites were eliminated due to insufficient room for mechanical equipment, height restrictions and landlord restrictions.

Safety and Compliance

The proposed wireless communications facility will not create any nuisance or be detrimental to the health, safety or general welfare, of persons residing or working in the neighborhood. T-Mobile technology does not interfere with any other forms of private or public communications systems, operating under FCC regulations

After construction of the facility, the site will be serviced once a month, during a routine scheduled maintenance window by a service technician. The site is unmanned and is a self-monitored facility. There will be no impact on parking or traffic in the area.

Conclusion

T-Mobile has identified this location for a proposed wireless telecomm facility for several reasons. The property provides an excellent location from which wireless coverage can be enhanced in the City of Milpitas and specifically in this highly residential area. This site promotes a stealth design for the panel antennas and the associated equipment cabinets. The panel antennas will be concealed within a radome on an existing stadium light pole and the equipment will be housed in an equipment enclosure that will be painted and textured to match the surrounding campus buildings. The proposed T-Mobile project will blend in with the surrounding campus and neighborhood environment. T-Mobile also welcomes the opportunity to participate in a project that will assist the Milpitas Unified School District and its students.

Community Benefits

Since its inception, wireless communications have provided services to communities far beyond mere convenience. Many businesses and Public Safety Agencies rely on these services in order to conduct important civic and commercial duties on a daily basis. Schools rely on an ability to reach parents quickly. Commercial Wireless companies have been at the forefront of critical communications services in recent events, such as earthquakes and fires in California. Traffic issues, weather and community events, are a few of the many services now available over these same communications devices. Wireless communications are an integral part of our national telecommunications infrastructure, and each community deserves the benefit of the best and most competitive service available.

E- 911

In accordance with Federal Communications Commission (FCC) Order 94-102, T-Mobile USA has launched a project to implement enhanced 9-1-1 services (Wireless E9-1-1) for its customers throughout California. Phase I of the project specified that the telephone number and receiving cell site or sector of the 9-1-1 caller be delivered to the 911 dispatch. Phase II adds a more precise location by triangulating on the location, (usually with 50-100 meter accuracy or better) in the form of latitude/longitude coordinates, to the Phase I information.

Many already view wireless phones as a lifeline. Each day more than 200,000 9-11 calls are made on cell phones, which is one third of all emergency calls that are placed.

T-Mobile Company Information

Based in Bellevue, Washington, the U.S. operations of T-Mobile International AG & Co. K.G., consists of T-Mobile USA, Inc. (formerly VoiceStream Wireless) and Powertel, Inc. (together "T-Mobile"). T-Mobile is one of the fastest growing nationwide wireless service providers, offering all digital voice, messaging and high-speed wireless data services to more than 16.3 million customers in the United States. A cornerstone of T-Mobile's strong consumer appeal has been its Get More® business strategy to provide customers with the best overall value in their wireless service so they can enjoy the benefits of mobile communications to Get More From Life®. T-Mobile has more than 24,000 employees across the country dedicated to delivering on its Get More® promise to provide customers with more minutes, more features and more service. The T-Mobile global brand name made its debut in the United States in July 2002, choosing California and Nevada as the first markets in the country to launch its wireless voice and data services. Here in the Bay Area, T-Mobile has purchased and taken control of the former PacBell Wireless/ Cingular System on January 5, 2005.

T-Mobile holds license in the California Market as follows: 1950.2-1964.8, 1965.2-1969.8 MHz and 1870.2-1884.8, 1885.2-1889.8 MHz.

T-Mobile offers consumers and business customers the most advanced mobile communications services available today, including voice, text messaging, and high-speed wireless data services. T-Mobile operates an all-digital, national wireless network based exclusively on GSM technology.

Enhanced Messaging Services - SMS, Instant Messaging & MMS

T-Mobile offers its customers a variety of options for using Short Messaging Service (SMS) or text messaging and Multimedia Messaging Service (MMS).

SMS: Every T-Mobile customer, regardless of device or rate plan, can send text messages via their handset to friends and family, no matter which wireless service provider they use. In addition, customers and their colleagues can use the Internet to send and receive text messages between wireless phones, devices and personal computers.

IM: T-Mobile customers can use Yahoo! ® Messenger, MSN® Messenger and AOL® Instant Messenger Software to interact with millions of instant messaging users worldwide.

MMS: T-Mobile has upgraded its entire national network to provide MMS services. MMS enables customers to complement their text messages with sound, animation and melodies to send to e-mail addresses and compatible handsets. As part of this rich visual communications offering, T-Mobile offers handsets that let customers take a picture and send it to any e-mail address or other MMS-capable phone and then talk about it — all from a single device. Additionally, MMS enables customers to send short video clips to e-mail or other MMS-capable phones, giving T-Mobile customers a whole new way to communicate.

2.5G GPRS High Speed Wireless Data

T-Mobile leverages its national, standards-based GSM network to provide customers with the latest in mobile communications including wireless data access through its T-Mobile Internet service. This allows customers to remotely access the Internet; get their corporate and personal e-mail; keep contacts and calendar information updated on the go; and get popular games, news and information services such as sports scores, stock quotes, horoscopes and games delivered automatically or on demand to their wireless handset or device.

T-Mobile HotSpotSM - Wi-Fi (802.11b) Wireless Broadband Internet Service

T-Mobile complements its existing national GSM/GPRS wireless voice and high-speed data network by providing Wi-Fi (802.11b) wireless broadband Internet access in more than 5,000 convenient public locations in the United States where people already go when they're away from their home or office. By combining the benefits of these networks, T-Mobile offers customers coverage where they want it and speed when they need it. T-Mobile is uniquely able to provide a comprehensive wireless service offering that meets customers' needs for wireless connectivity. Backed by T-1 circuits, T-Mobile HotSpot service is reliable and fast enough to accommodate a broad spectrum of applications from checking e-mail to multimedia videoconferencing.

City of Milpitas
Planning Division
455 E. Calaveras Blvd.
Milpitas, CA 95035
(408) 586-3279

Questionnaire for Telecommunication Facility Providers

All applicants requesting to install telecommunications facilities within the City of Milpitas must complete this questionnaire as part of their use permit application submittal.

Applicant Name: T-MOBILE
Applicant Address: 1855 GATEWAY BLVD., 9TH FLOOR, LIVERMORE, CA 94520
Applicant Phone: (925) 521-5886 OR (415) 672-2314
Applicant Fax and e-mail address: (925) 521-5570

Provide a brief description of project (Telecommunications Facility): INSTALLATION AND OPERATION OF 3 PANEL ANTENNAS ON AN EXISTING STADIUM LIGHT POLE AND FOUR ASSOCIATED EQUIPMENT CABINETS WITHIN A CMU ENCLOSURE FOR THE T-MOBILE NETWORK.
Location of Project: 1285 ESCUELA PARKWAY, MILPITAS, CA 95035

1. Please indicate below the frequency range you plan to use?

- ☐ VHF Low-Band (30-50 Mhz or 72-76 Mhz)
☐ VHF High-Band (136-174 Mhz or 220-222 Mhz)
☐ UHF or T-Band (406-420 Mhz or 450-470 Mhz or 470-512 Mhz)
☐ 800 or 900 Mhz Band (800-960 except 900 Mhz Spread Spectrum)
☐ 900 Mhz Spread Spectrum (902-928 Mhz)
☒ Other than specified above (State frequency band in Mhz). Describe: 1900 MHZ

2. Please indicate below the channel/system proposed for use?

- ☐ A single channel
☒ Multiple channel
☐ A frequency agile system
☐ A spread spectrum system
☐ Other than specified above. Describe: _____

3. Please indicate below the frequency range you plan to use?

- ☐ Narrow band (± 5 KHz or less deviation)
☐ Broad band (greater than ± 5 KHz deviation)
☐ Spread Spectrum
☒ Other than specified above. Describe: TX - 1950 MHZ to 1970 MHZ
RX - 1870 MHZ to 1890 MHZ

4. What will be the effective radiated power (ERP) be when all channels at your proposed site are radiating? 52.5 dbm Will the site be in compliance with current ANSI radiation health standards? yes
5. What horizontal radiation pattern is planned for this project?
- ☐ Omnidirectional
☒ Sected
☒ Directional (provide half power beam width) H - 65° V - 70°
6. What will the vertical radiation angle (half power beam width) be for your proposed antenna(s)?
70°
7. How high above the local terrain (e.g., surrounding structures) will the center of radiation of your proposed antenna(s) be? 85 feet
8. How close to your proposed project is the nearest roadway 568 feet/miles and, if elevated, what is the roadway's height above the local terrain? N/A feet
9. How close to your proposed project is the nearest regularly occupied building and how high is the top floor above local terrain? 18.5 FT & 15.5 FT (top of Bldg)
10. What is the distance to the nearest existing radio communications or broadcast antenna(s) if less than 1/2 mile? N/A feet/miles. Answer question 1 for such existing antenna(s) and identify owner/operator, if known. METRO PCS ANTENNAS ON ADJACENT STADIUM LIGHT POLE APPROXIMATELY 100 FT
11. What is the status of your FCC license grant? ACTIVE - EXPIRES ON 4-28-07
 (Include a *copy of the license with submittal of this questionnaire.)

NOTE: The below listed items are required by the applicant as part of this submittal:

- a) Provider's build-out map* showing all sites anticipated within Milpitas (see question no. 2)
- b) Photo simulations** of antenna(s) as viewed from at least three surrounding view points. Show "worst case" vantage points.
- c) List of all sites that were investigated** for a particular search ring and the reasons why they were discarded. Include names and phone numbers of persons contacted regarding potential sites.
- d) Copy of applicants Power Density Study* (see item no. 4).

* 20 copies (Telecommunication Commission)

** 35 copies (Telecommunication Commission & Planning Commission)

Back of
Telecommunication Questionnaire



T-Mobile

Milpitas Development Plans

Legends

Green Circles – Existing Sites

Red Circles – Planned Sites

Green Coverage – Good Signal levels

Yellow Coverage – Fair Signal Levels

Gray Coverage – Unreliable Signal Levels

Current Build

T-Mobile



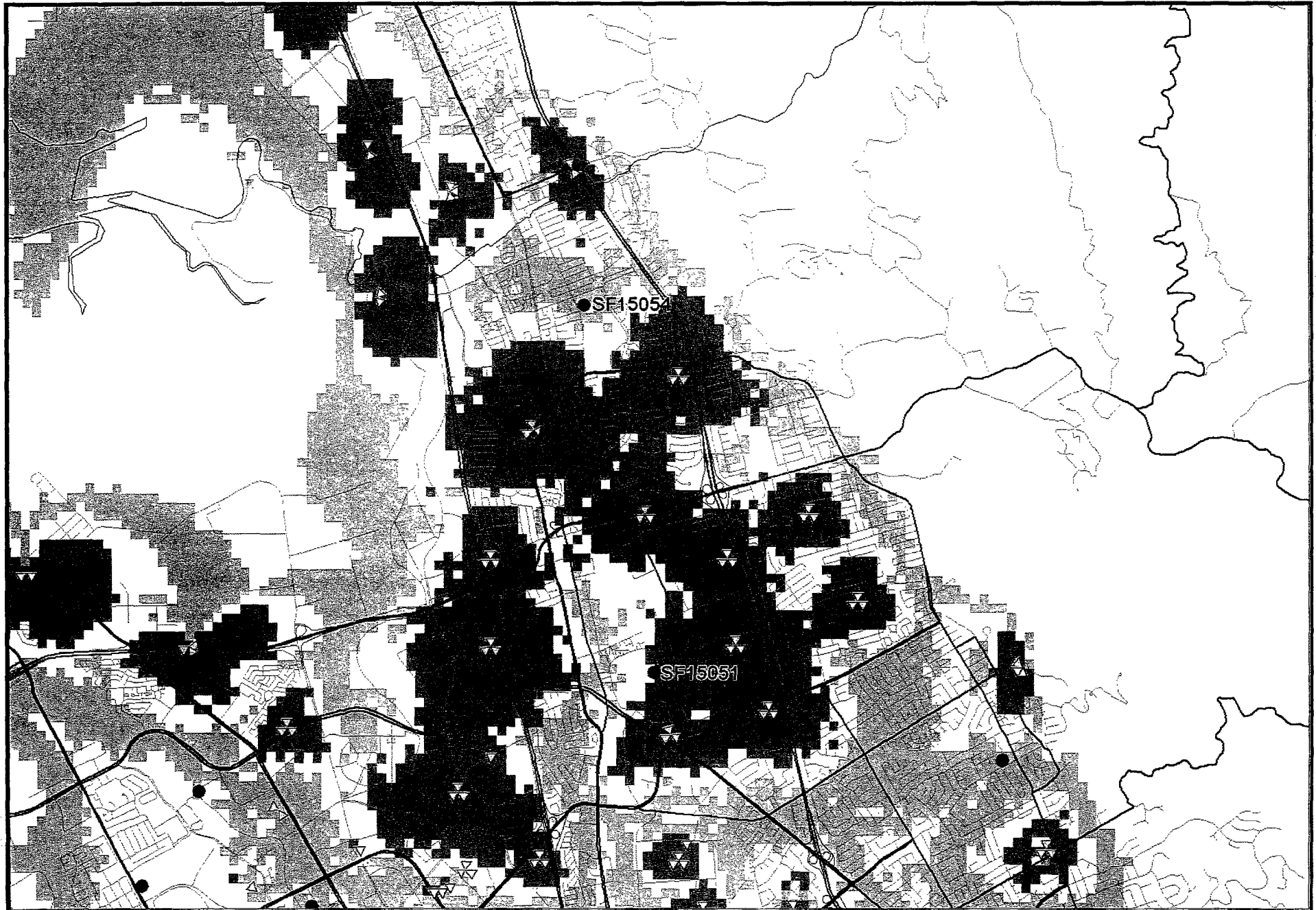
T-Mobile

T-Mobile

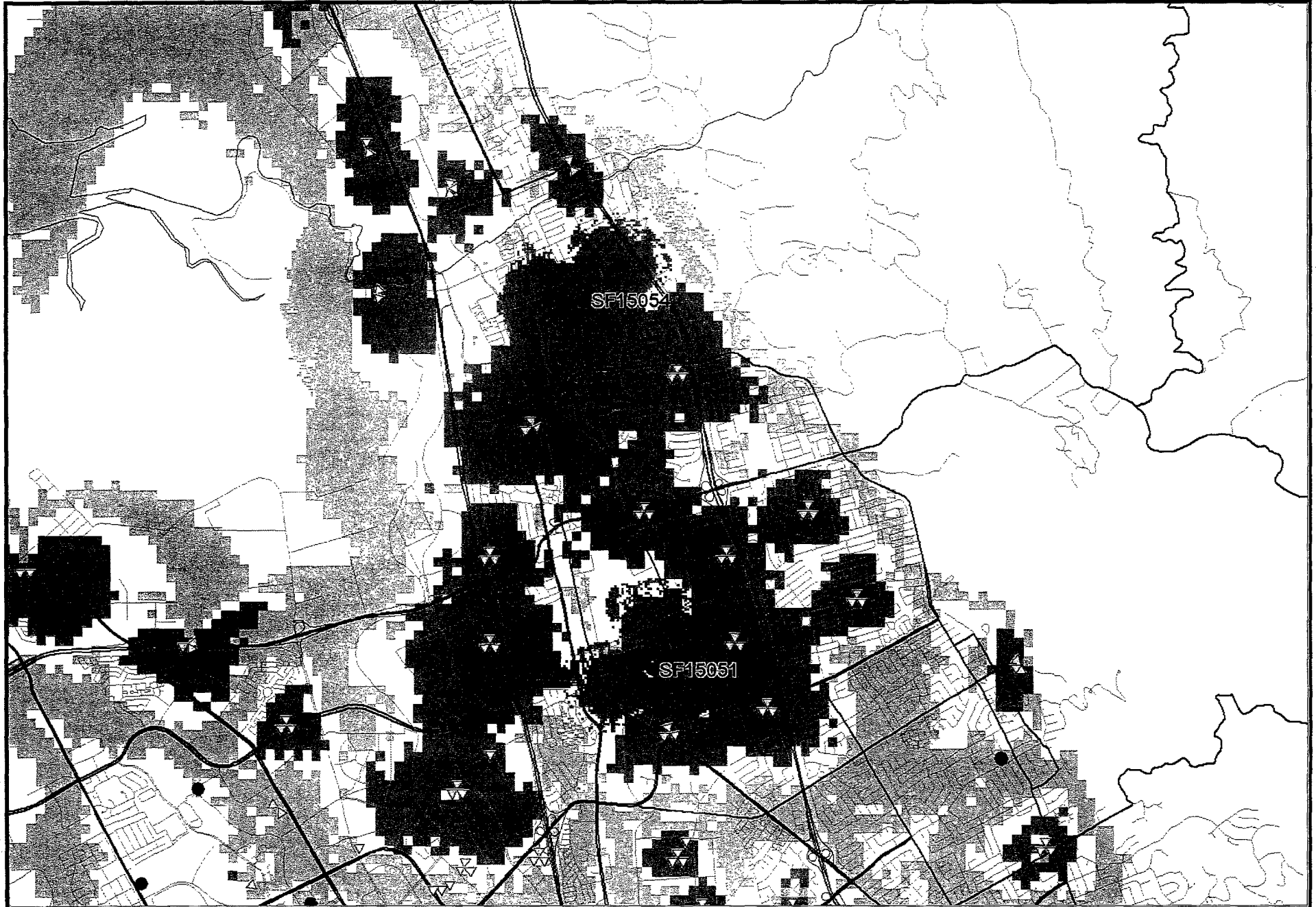


Current Coverage

T-Mobile



Coverage with SF15051 and SF15054 T-Mobile



■ ■ ■ ■ Mobile

Get more from

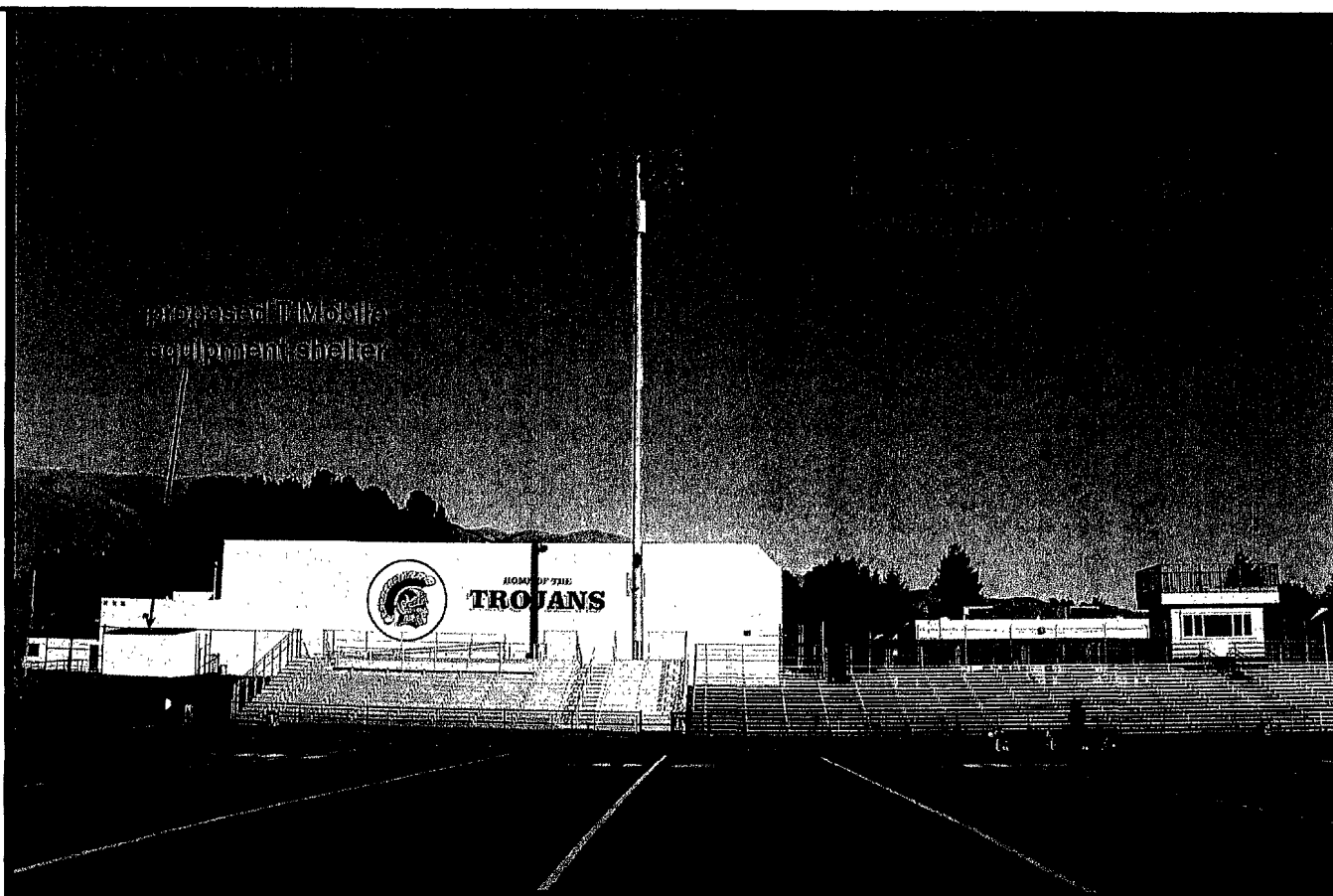
Photosimulation of the proposed telecommunication facility as seen looking east from the football field

T-Mobile

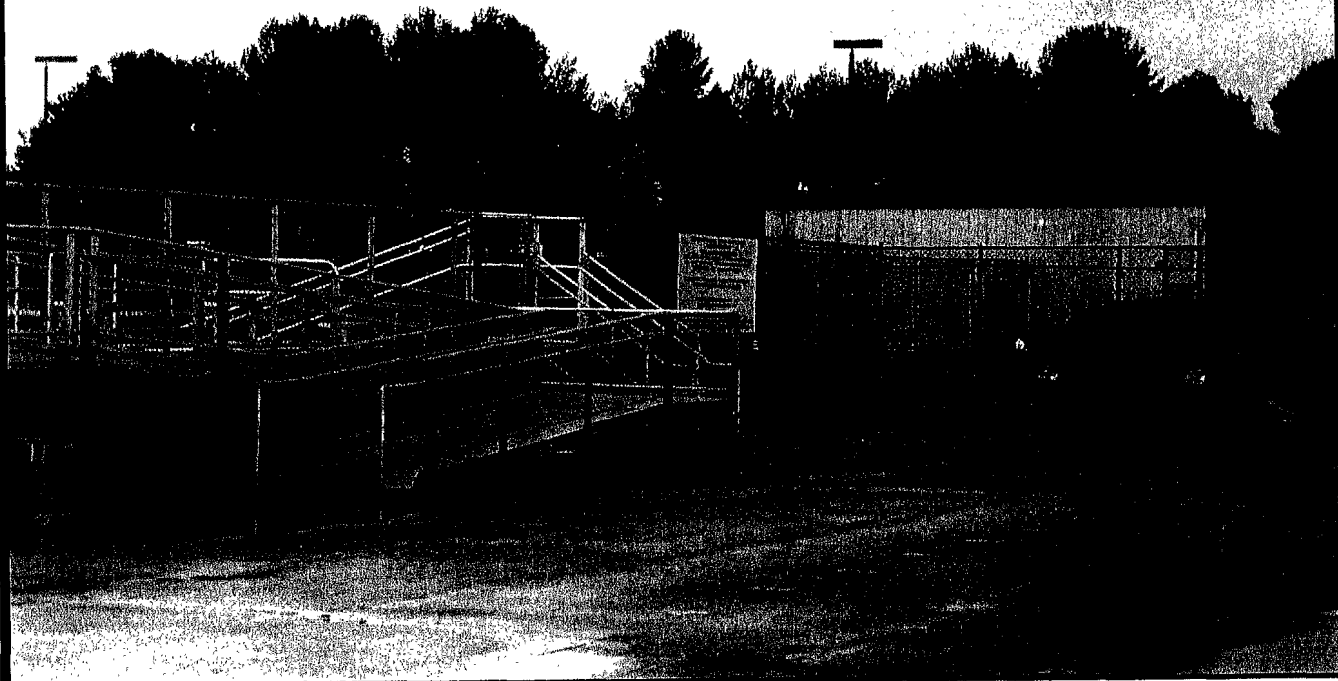
SF15054

Milpitas High School

1285 Escuela Pkwy
Mipitas, CA 95035



Existing



T-Mobile

SF15054

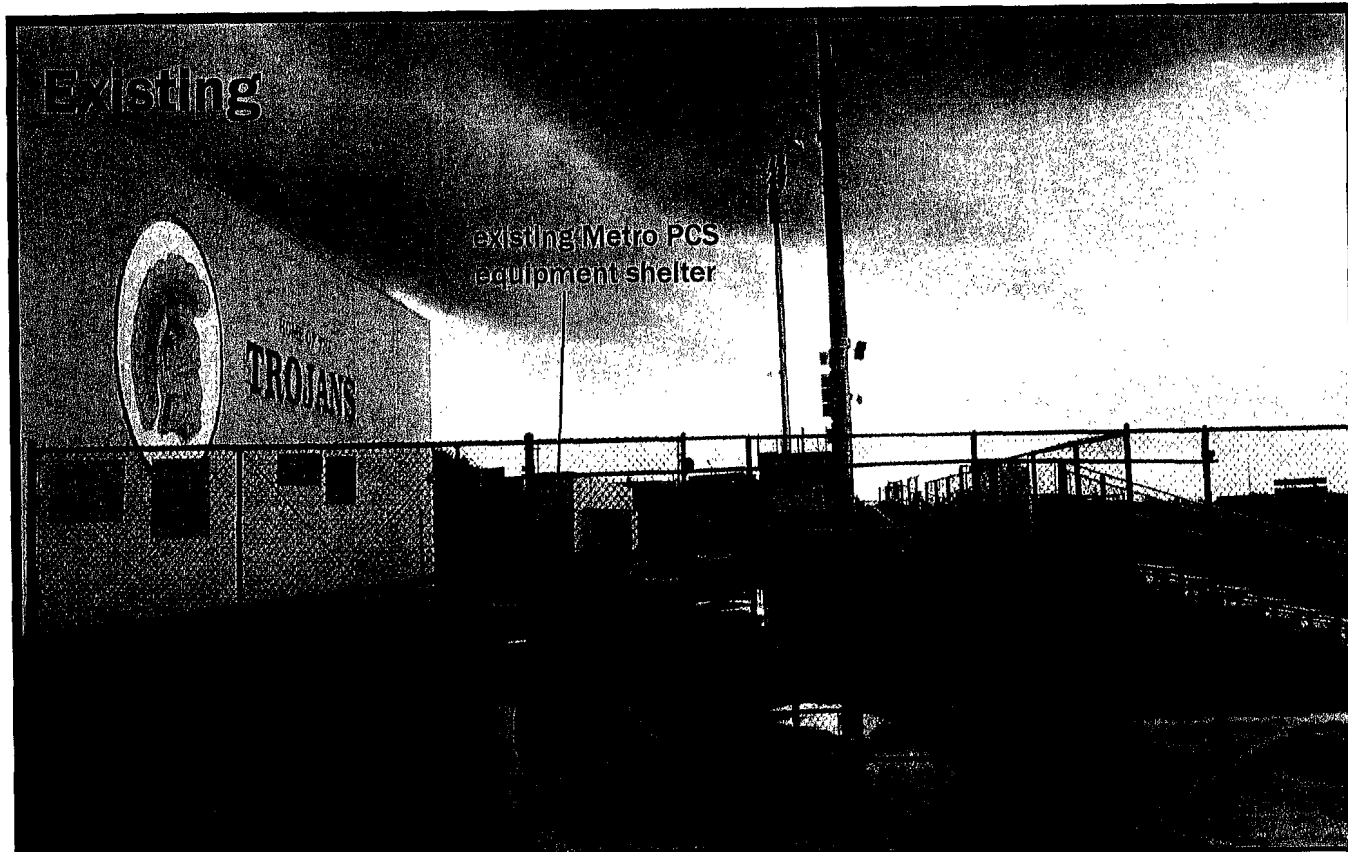
Milpitas High School

1285 Escuela Pkwy
Milpitas, CA 95035

Proposed



Photosimulation of the proposed telecommunication facility as seen looking northwest

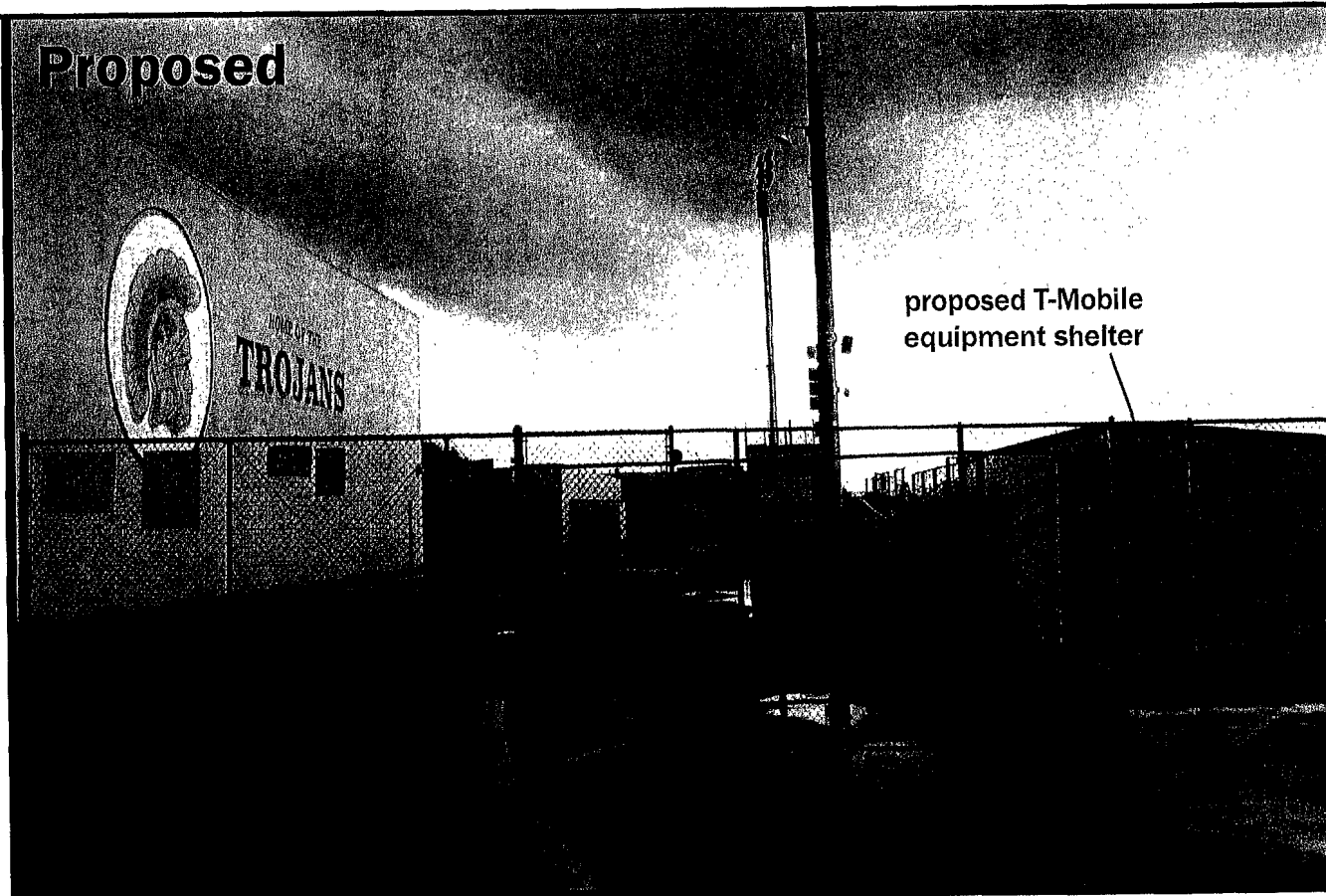


T-Mobile

SF15054

Milpitas High School

1285 Escuela Pkwy
Mipitas, CA 95035



KNLG833

0000094516

03/17/2000



Federal Communications Commission

Wireless Telecommunications Bureau

Radio Station Authorization

Call Sign: KNLG833	File Number: 0000094516	Print Date: 03/17/2000
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Name of Licensee:

Attention: Dan Menser
 VoiceStream PCS BTA I License Corporation
 3650 131 Avenue S.E., Ste. 200
 BELLEVUE WA 98006

Market Number: BTA404	Channel Block: E	Sub-Market Designator: 0
---------------------------------	----------------------------	------------------------------------

Market Name: San Francisco-Oakland-San Jose, CA

The license hereof is authorized, for the period indicated, to operate a radio transmitting station in accordance with the terms and conditions hereinafter described. This authorization is subject to the provisions of the Communications Act of 1934, as amended, subsequent Acts of Congress, international treaties and agreements to which the United States is a signatory, and all pertinent rules and regulations of the Federal Communications Commission, contained in Title 47 of the code of Federal Regulations.

Effective Date	1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date	Expiration Date
04/28/1997	04/28/2002	04/28/2007			04/28/2007

Conditions:

Pursuant to Section 309(h) of the Communications Act of 1934, as amended, (47 U.S.C. 309(h)), this license is subject to the following conditions: This license does not vest in the licensee any right to operate a station nor any right in the use of frequencies beyond the term thereof nor in any other manner then authorized herein. Neither this license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended, 47 U.S.C. 151, et seq. This license is subject in terms to the right of use or control conferred by Section 706 of the Communications Act of 1934, as amended, 47 U.S.C. 606.

Special Conditions:

This authorization is subject to the condition that the remaining balance of the winning bid amount will be paid in accordance with Part 1 of the Commission's rules, 47 C.F.R. Part 1.

This authorization is subject to the condition that, in the event that systems using the same frequencies as granted herein are authorized in an adjacent foreign territory (Canada/United States), future coordination of any base station transmitters within 72 km (45 miles) of the United States/Canada border shall be required to eliminate any harmful interference to operations in the adjacent foreign territory and to ensure continuance of equal access to the frequencies by both countries.

A graphical representation of the geographic area authorized to this call sign may be generated by selecting 'License Search' at the following web address: <http://wtbwww05.fcc.gov>



Diamond Services
3860 Industrial Way
Benicia, Ca 94510
Ph: (707) 751-5900
Fax: (707) 751-5901

**RADIO FREQUENCY ANALYSIS
PROPOSED T-MOBILE SITE NO. SF-15054
"MILPITAS HIGH SCHOOL"
1285 ESCUELA PARKWAY,
MILPITAS, CALIFORNIA**

**By: Diamond Services
Date 11/30/2005**

Report Summary

Based upon information provided by T-Mobile and the design engineer, and using the calculated method for determining RF field strength, it is the engineer's opinion that the telecommunication facility which will be located at 1285 Escuela Parkway, Milpitas, California will comply with the FCC's current prevailing standard for limiting human exposure to RF energy. The FCC standard (OET 65) is based upon input from ANSI, IEEE, as well as other agencies.

Due to the mounting method utilized, the general public would not normally be able to approach the antennas. Therefore, no significant impact on the general population is expected. The calculated electromagnetic field strength level in publicly accessible areas is less than the existing standard allows for exposure of unlimited duration. Additionally, due to the mounting method used, no significant impact on the environment is expected.

General Recommendations

For personnel who maintain or work near the antennas, a training program in exposure to RF fields is recommended, since any access closer than thirteen feet to the face of a T-Mobile antenna at this site could expose personnel to RF field levels greater than the occupational limits, and such access should be prohibited. At this site, public access to the face of an antenna is not expected. Maintenance personnel should be instructed to contact T-Mobile prior to working in front of an antenna.

RF warning signs should be placed at the base of the light standard.

Background

Diamond Services¹ has been retained by T-Mobile to conduct a Radio Frequency (RF) electromagnetic analysis for a proposed telecommunication facility to be located at 1285 Escuela Parkway, Milpitas, California. This analysis consists of a review of the proposed site conditions, calculation of the estimated RF field strength of the telecommunication facility, and the provision of a comparison of the estimated field strength with the Federal Communication Commission (FCC) recommended guidelines for human exposure to RF electromagnetic fields.

Site Description

Based upon the drawings provided by the design engineer, three antennas will be mounted on an existing light pole. The antennas will be mounted approximately 80'-0" (to bottom of antennas) above ground level. These antennas will provide three sectors of approximately 120° each for a total coverage of approximately 360°.

¹ PGI Group d.b.a. Diamond Services

Diamond Services

The antenna will be oriented such that the main lobes are oriented toward the horizon. Normal public access to the front of the antenna is not expected due to the mounting location and method utilized. Occupational access to the front of the antennas is not normally expected.

RF Field Strength Calculation Methodology

A generally accepted method is used to calculate the expected RF field strength. The method uses the FCC's recommended equation² which predicts field strength on a worst case basis by doubling the predicted field strength. The following equation is used to predict maximum RF field strength:

$$\text{Equation 1} \quad S = \frac{(2)^2 PG}{4\pi R^2} = \frac{PG}{\pi R^2} = \frac{EIRP}{\pi R^2}$$

Where:

S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

The ground level effect of the T-Mobile emissions was calculated using a maximum downtilt of 5°, and a maximum ERP of 1531 watts per sector. Results were calculated for a height of 6'-6" above ground level. Using these factors, the maximum calculated T-Mobile fields at ground level are 0.13% of the existing standard for general population uncontrolled exposure.

Calculations were performed for the main antenna lobe, the -3dB point, and the first and second lower lobes.

See Table 1 for the FCC's guidelines on Maximum Permissible Exposure (MPE). Note that the RF range referenced for this analysis is the range of 1500 – 100,000 Mhz shown in Table 1, which is included in Appendix A.

² Reference Federal Communication Commission Office of Engineering Technology Bulletin 65

City of Milpitas Requested Information

- Q. What will be the effective radiated power (ERP) when all channels at the proposed site are radiating?
- R. The effective radiated power (ERP) will be a maximum of 1531 watts per sector.
- Q. Will the site be in compliance with current ANSI radiation health standards?
- R. Calculations show that the site will be in compliance with current FCC standards. The current FCC standards incorporate ANSI and other organizations' standards.
- Q. What horizontal radiation pattern is planned for the project (i.e. Omnidirectional, Sectorized or Directional)?
- R. The horizontal radiation pattern will be three sectors of approximately 120 ° each.

Exposure Environments

The FCC guidelines incorporate two separate tiers of exposure limits that are dependent on the situation in which the exposure takes place and/or the status of the individuals who are subject to exposure. The decision as to which tier applies in a given situation should be based on the application of the following definitions.

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

General population/uncontrolled exposure limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public always fall under this category when exposure is not employment-related.

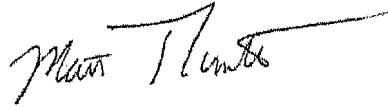
For purposes of applying these definitions, awareness of the potential for RF exposure in a workplace or similar environment can be provided through specific training as part of a RF safety program. Warning signs and labels can also be used to establish such awareness as long as they provide information, in a prominent manner, on risk of potential exposure and instructions on methods to minimize such exposure risk. For example, a sign warning of RF exposure risk and indicating that individuals should not remain in the area for more than a certain period of time could be acceptable.

Another important point to remember concerning the FCC's exposure guidelines is that they constitute ***exposure*** limits (not ***emission*** limits), and they are relevant only to locations that are ***accessible*** to workers or members of the public. Such access can be restricted or controlled by appropriate means such as the use of fences, warning signs, etc., as noted above. For the case of occupational/controlled exposure, procedures can be instituted for working in the vicinity of RF sources that will prevent exposures in excess of the guidelines. An example of such procedures would be restricting the time an individual could be near an RF source or requiring that work on or near such sources be performed while the transmitter is turned off or while power is appropriately reduced.

Diamond Services

Qualifications of Reporting Engineer

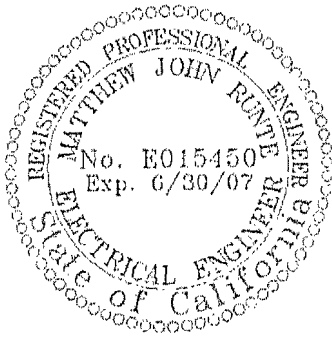
Mr. Runte has been involved in the measurement of RF emissions since 1979. He has designed numerous RF systems including both site design and RF system design. He is a registered Professional Engineer in the state of California, and all contents of this report are true and correct to the best of his knowledge.



Signed:

Matthew J. Runte, P.E.

Date: 11/30/2005



Professional Engineer Stamp

APPENDIX A

Term Definitions

Exposure Exposure occurs whenever and wherever a person is subjected to electric, magnetic or electromagnetic fields other than those originating from physiological processes in the body and other natural phenomena.

Exposure, partial-body. Partial-body exposure results when RF fields are substantially nonuniform over the body. Fields that are nonuniform over volumes comparable to the human body may occur due to highly directional sources, standing-waves, re-radiating sources or in the near field.

General population/uncontrolled exposure. For FCC purposes, applies to human exposure to RF fields when the general public is exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public always fall under this category when exposure is not employment-related.

Maximum permissible exposure (MPE). The rms and peak electric and magnetic field strength, their squares, or the plane-wave equivalent power densities associated with these fields to which a person may be exposed without harmful effect and with an acceptable safety factor.

Occupational/controlled exposure. For FCC purposes, applies to human exposure to RF fields when persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits (see definition above), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Table 1. LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)**(A) Limits for Occupational/Controlled Exposure**

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f ²)*	6
30-300	61.4	0.163	1.0	6
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6

(B) Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f ²)*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/1500	30
1500-100,000	--	--	1.0	30

f = frequency in MHz

*Plane-wave equivalent power density

NOTE 1: *Occupational/controlled* limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

NOTE 2: *General population/uncontrolled* exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

